

Evaluation of International E-mail Discussion Groups for Practitioners of Pediatric and Neonatal Intensive Care

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Many e-mail based discussion groups exist on the Internet to provide medical professionals with a rapidly responsive medium for the international exchange of ideas relating to patient care. Several such discussion groups each serve more than a thousand professionals in more than 30 countries, each distributing a dozen or more messages each day to every subscriber. There is very little known about the time being spent by professionals interacting with these discussion groups, and very little known about the impact of the discussions on patient care. We wished to test the hypotheses that these discussion groups provide information which is being used as education, to enhance professional competence, and to alter clinical practice; and that subscribers attach significant value to their participation in the discussion groups.

METHODS

Beginning in early February 1996 an electronic survey was sent to 2339 members of 2 e-mail discussion groups, PICU@its.mcw.edu, and NICU-NET@u.washington.edu. Participants were asked for demographic information, experience and skill level relating to e-mail, time spent with the discussion groups, perceived usefulness of different types of discussions, and the ways in which the discussions were used clinically. Survey mailings were direct (not via the discussion groups) and were followed by repeat mailings to those not responding to the first mailing. E-mail responses were parsed by a template-based perl program (written by P.T-H). The study was analyzed for construct validity by correlating an overall assessment question with a summary of the specific questions, and by factor analysis. Internal (Likert scale) reliability was measured by Cronbach's alpha statistic.

RESULTS

The response rate for the full survey was 886/2273 (39%), with an additional 225 responses to an abbreviated followup survey yielding a total response rate of 1111/2273 (49%). The majority of respondents were male physicians, with an average age of 40 ± 6.7 years, who had completed subspecialty training in intensive care, and were working at a university-affiliated hospital. Most had been using e-mail for more than 6 months, and considered themselves moderately adept in that use. 72% felt that the discussion group helped weekly to keep them informed about current issues and practices in their field(s), and 52% felt that, at least monthly, they used information from the discussion group(s) that was not readily available in medical journals. Overall, 81% agreed or strongly agreed that the discussion group improved their professional competency. When asked to compare the value of 6 months of membership on an e-mail discussion group with more traditional educational media, 32% compared it with attending a national conference, and 19% compared it to a journal subscription. Cronbach's alpha was .82. Construct validity testing yielded a coefficient of .25 ($p < .05$).

CONCLUSION

Internet-based e-mail discussion groups for health care professionals can be an important part of a educational strategy for maintaining professional competency. Despite the very low cost of this medium for most, the value is felt to be comparable to that of far more expensive forums for education. Further efforts will be undertaken to ascertain the reasons for the failure of 51% of the participants to reply to the survey.